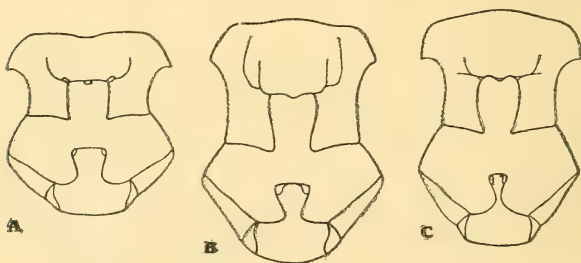


XI. — *A Revision of the Old World Cyrtacanthacrini*
(Orthoptera, Acrididæ).—I. *Introduction and Key to*
Genera. By B. P. UVAROV, F.E.S., Assistant Entomologist, Imperial Bureau of Entomology.

THE group Cyrtacanthacrini comprises mostly large, or middle-sized, grasshoppers, characterised by the presence of a well-developed prosternal spine, by the lack of the outer apical spine of the hind tibiæ, and, more particularly, by the inner angles of the mesosternal lobes being straight or acute, but not rounded, and their inner margins rectangular or concave, but never convex (see figs. 1 A, B, C). Practically all authors have considered this peculiar shape of the mesosternal lobes as a generic character, and all the species possessing it, no matter how unlike each other they may be

Fig. 1.



Sternum : A, *Acridoderes crassus*, Bol. ; B, *Valanga nigricornis* (Burm.) ;
C, *Patanga succincta* (L.). $\times 4$.

in other characters, have been treated as congeneric and identified as *Acridium* spp., according to Serville's vague definition of the genus. As a consequence, more than one hundred species have been described under *Acridium*, many of them strikingly dissimilar and obviously not congeneric. This made the identification of species very difficult and uncertain, and as the majority of species, owing to their large size, have already been described long ago by older authors, who paid little attention to morphological characters and founded their species almost solely on coloration, the confusion of species has become quite overwhelming and a thorough revision is indispensable, the more so that the group includes also some of the most important swarming

locusts. In this work, however, I have restricted myself to a study of the Old World representatives of the group only, because of a lack of sufficient material from the New World*.

The rich collections of the British Museum, containing numerous types of the species described by Walker, have served as a basis for this work, but it could not have been successfully accomplished without the generous loan of types and other materials from practically all the European museums. A most obliging assistance in this respect has been given by the following persons, all of whom I should like to thank here once more:—Dr. L. Berland and Dr. L. Chopard (Paris Museum; Finot's types); Prof. Y. Sjöstedt (Stockholm Museum; types of species described by himself and by Stål); Prof. R. Ebner (Vienna Museum; types of species described by H. Krauss, K. Holdhaus, and H. Karny); Dr. C. Bolivar (Madrid Museum; I. Bolivar's types); Dr. de Witte (Museum of the Belgian Congo; I. Bolivar's types); Dr. G. Severin (Belgian Museum; I. Bolivar's types); Dr. L. Péringuey (S. African Museum, Cape Town); Prof. E. B. Poulton (Oxford Museum); Prof. M. Bedot and Dr. J. Carl (Geneva Museum). To Mr. J. H. Durrant I am greatly obliged for his valuable assistance in settling some most entangled and doubtful questions of synonymy.

Up to the year 1870, when Walker established his genus *Cyrtacanthacris*, all the species belonging to the group under revision were known under the generic name *Acridium*, which is being used even at present by some authors. The following history of generic names, however, shows most clearly that *Acridium* can only be applied to members of this group if we deliberately chose to preserve the evident mistake made by Serville in the application of the name.

The genus *Acrydium* was established by Geoffroy in 1762 (Hist. abr. des Insectes, i. p. 390) to include all short-horned grasshoppers, of which he records six species as occurring in the vicinity of Paris, none of them belonging to the subfamily Catantopinae (= Acridiinae, auct.) characterised by the armed prosternum. There is no indication whatever as to which of the six species mentioned by Geoffroy should be regarded as the genotype of *Acrydium*, but there is certainly no

* There is also much confusion in the systematics and synonymy of numerous American representatives of the group, and it is to be hoped that American orthopterists will soon clear it up, although this cannot be done without consulting European collections.

reason to treat as such the first species mentioned by Geoffroy, which, quite incidentally, happens to be *Locusta germanica*, Roesel (= *Sphingonotus cærulans*, L.), as is suggested by Sjöstedt (K. Sven. Vet.-Akad. Handl. lxii. No. 3, pp. 256–257, 1921). On the other hand, Fabricius (Syst. Entom. p. 278) in 1775 restricted the genus *Acrydium* to only two of the species mentioned by Geoffroy, viz. *bipunctatum* and *subulatum*, while he separated all other short-horned grasshoppers into the Linnean genera *Tryxalis* and *Gryllus*. The same two species are mentioned by Latreille (Hist. Nat. Crust. Ins. iii. 1802, p. 284) as “exemples,” i. e., types of his genus *Tetrix*, which makes this name a pure synonym of *Acrydium* (Geoffr.), Fabr.*

It was Serville who in 1831 first applied Geoffroy's name *Acrydium*, which he corrected into *Acridium*, in an altogether different sense, while he included in his genus under that name several larger species of short-horned grasshoppers with armed prosternum (Ann. Sci. Nat. xxii. p. 282); the genotype was not indicated. Serville's conception of *Acrydium* (or *Acridium*, which is, of course, the same word differently spelt) has been, most unfortunately, adopted by all subsequent authors of standard works on Orthoptera (Burmeister, Stål, Brunner v. Wattenwyl, etc.), while *Acrydium* (Geoffr.), Fabr., has been quite incorrectly replaced by *Tetrix*, Latr. Kirby in 1890 (Scient. Proc. R. Dublin Soc. p. 592) restored the correct interpretation of the genus *Acrydium* (Geoffr.), Fabr., and this has been accepted, especially after the publication of his Catalogue, by many authors, but some of them are still using the name in Serville's sense. Prof. Sjöstedt recently proposed to use both names—*Acrydium*, Geoffr., for *Tetrix*, Latr., and *Acridium*, Serv., for certain members of Catantopinae; but this opinion, based upon a different Latin transliteration of the same letter in the original Greek word, cannot be accepted †;

* A definite fixation of the single genotype of *Acrydium* (Geoffr.), Fabr., was made in 1815 by Leach (Edinb. Encycl. ix. p. 120), who quotes under it *A. subulatum* only. Later on, in 1833, Curtis (Brit. Ent. x. pl. 439) formally indicated *bipunctatum* as the genotype of *Acrydium*, but it makes no difference in the conception of the genus, as the two species are congeneric.

† It may be mentioned also that Serville himself in his next book (Hist. Nat. Ins. Orth. 1838) wrote the name as *Acrydium* (p. 640), while in the descriptions of species on the succeeding pages (pp. 642, 643, etc.) he spells it *Acridium*, which makes it quite clear that he did not mean to describe a new genus, but simply used Geoffroy's generic name in a different sense.

still less convincing is Sjöstedt's proposition to regard *ruficornis* as the genotype of *Acridium*, Serv., on the false principle that the first species mentioned under the genus is the genotype.

It is obvious, therefore, that there has been no acceptable name for the genus described by Serville under the preoccupied name *Acridium*, until Walker (Cat. Derm. Salt. Brit. Mus. iii. p. 550) established in 1870 the genus *Cyrtacanthacris*, which partly covered *Acridium*, Serv.; the genotype of *Cyrtacanthacris* was fixed only in 1910 by Kirby (Cat. iii. p. 446), as *Gryllus Locusta ranaceus*, Stoll, which is conspecific with *Gryllus Locusta tartaricus*, L. (see below). Walker's name, however, has never been recognised by other authors.

The next genus of the group described was *Schistocerca*, Stål (Rec. Orth. i. p. 64, 1873), established as a subgenus of the genus *Acridium*, Serv., to include *Acridium peregrinum*, Oliv. (= *Gryllus gregarius*, Forsk.; see below), and its American allies. There can be hardly any doubt as to the genotype of this genus, though it was formally fixed only in 1910 by Kirby (Catalogue, iii. p. 454) as *Gryllus Locusta tartaricus*, L., which he incorrectly (see below) applied to *Gryllus gregarius*, Forsk.

L. Bolivar in 1889 (Jorn. Sci. Lisboa, i. p. 163) founded another new genus of the group, *Acridoderes*, with a single species *A. crassus*, which thus automatically becomes the genotype, but several other species described by the same author under that generic name later on do not belong to the genus.

In 1896 Karsch (Stett. Ent. Ztg. lvii. p. 303) established the genus *Orthacanthacris*, again for a single species, *O. humilicrus*, Karsch, which is therefore the genotype. As, however, he did not give a proper description of the genus, the latter has been interpreted by subsequent writers incorrectly. Thus, Karny (Sitz. Akad. Wiss. Wien, cxvi. 1907, p. 304) included in the subgenus *Orthacanthacris* of the genus *Locusta**, besides *humilicrus*, *moesta* of Serville (described by him as *wernerella*), which is clearly not congeneric with it. A still more vague and indefinite conception of the genus

* He followed the incorrect conception of the genus *Locusta* advanced by Krauss, who worked on the false principle of elimination and fixed *Gryllus Locusta tartarica*, L., as the genotype of *Locusta* in 1902, although the genotype had been fixed as early as 1815 by Leach as *G. Locusta migratoria*, L. (see my paper on the genus *Locusta*, L., in Bull. Ent. Res. xii. 1921, p. 136).

Orthacanthacris may be found in Kirby's Catalogue (iii. p. 444), he having included in it as many as eleven species belonging to three genera, according to our present views. Later on, in 1914 (Fauna Brit. India, Acrid. p. 224), he gave his own extremely vague description of the genus *Orthacanthacris*, which does not even fit the genotype, *O. humilicrus*; it is obvious that his idea of the genus originated not from the study of the genotype, but merely from the name of the genus, as he simply included in it all species of "*Acridium*" with the prosternal spine straight.

More recently, three more genera, all rather aberrant from the general type, have been described, viz., *Phyxacra*, Karny (1907), *Congoa*, Bolivar (1911), and *Loiteria*, Sjöstedt, but no attempt has ever been made to clear up the generic classification of the group. C. Willemse, who has recently (1921) tabulated the Oriental and (partly) Australian genera of the subfamily Catantopinae (Zoolog. Meded. vi. 1, p. 15), followed Kirby in the conception of the two genera *Cyrtacanthacris* and *Orthacanthacris*. Prof. Sjöstedt, in his just-published monograph of the Australian Acrididae (K. Sven. Vet.-Akad. Handl. lxii. No. 3, 1921), goes back to the adoption of a single genus, *Acridium* (besides *Loiteria*, which is a very aberrant insect), as accepted by Serville, Stål, etc.; his reasons for this have been discussed above*, and there is no need of further criticism.

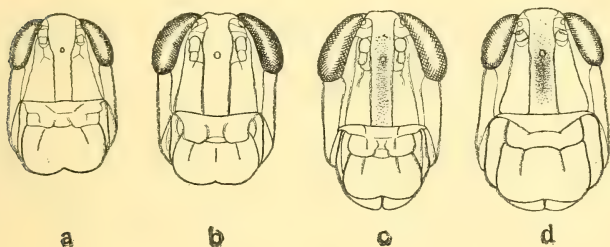
I have deliberately omitted in the foregoing outline of the history of the group to mention the comparatively recent revision of the genus "*Acridium*, Serville," by Finot (Ann. Soc. Ent. France, lxxvi. 1907, pp. 247-354), as it deserves a special discussion, being regarded as a standard work by all the modern orthopterists who use it for the identification of species. It has been, however, greatly overestimated, and its chief fault is that the author lacked not only critical judgment, but even the correct knowledge and appreciation of characters, as his classification of the species of the genus "*Acridium*" (in which he included indiscriminately all insects described under this name by old writers) is based exclusively on colour-characters without any reference to

* Prof. Sjöstedt objects also to alterations in the family-names of certain groups of Orthoptera, and especially to transferring the name Locustidae from long-horned grasshoppers to the short-horned ones, which have been called Acridiidae; this was a mistake on the part of Kirby, who correctly removed *Locusta* from the long-horned grasshoppers, Tettigoniidae, but quite unnecessarily altered the name Acridiidae into Locustidae, whereas the family must be called Acrididae after *Acrida*, L.

morphology, and even his detailed descriptions of the species he had before him are remarkable for their vagueness and superficiality, rendering them to a large extent useless and even misleading, as I am able to state after a study of the majority of his types.

A superficial glance at a collection of "*Acridium*"-species is sufficient to show the impossibility of keeping them all in one genus, or even in three or four genera, while a careful study of all morphological characters reveals a number of very important differences between groups of species which must be treated as genera. Of those characters, one of quite special value is the structure of the head, particularly of the frontal ridge (fig. 2), which enables us to make

Fig. 2.



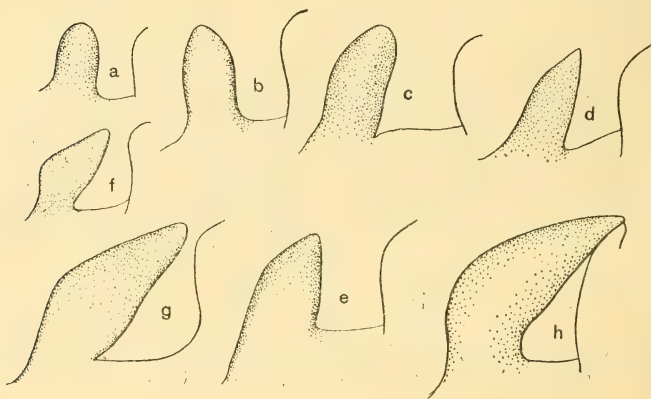
Front view of head; *a*, *Acridoderes crassus*, Bol.; *b*, *Anacridium egyptium* (L.); *c*, *Valanga nigricornis* (Burm.); *d*, *Patanga succincta* (L.). $\times 4$.

the primary division of the group. Further, the shape of the elytra and their reticulation (but not the venation, *i. e.* the position and form of the principal veins, which is fairly uniform throughout the group) supply some excellent characters of doubtless generic value. The shape of the prosternal spine (fig. 3) is also, as a rule, of generic value, although the variations in its structure are limited, and accordingly it is used for separating groups of genera. A very great importance is attached by me to the shape of the external genitalia, especially of the male sex, as this is a character, or rather a complex of characters, not likely to be influenced by the external conditions. In some particular cases, genera are aberrant from their nearest allies in other respects, as, for instance, *Orthacanthacris*, which has very peculiarly shaped hind legs. As a rule, the type of coloration is also

of generic value, although I have tried to avoid the introduction of this character, which may be misleading, into my key to genera. The number of spines on the hind tibiæ is not quite constant in the subfamily, but in some cases it is a generic character.

The number of genera thus separated out by purely morphological characters may seem too large, and the genera too restricted, but generic classification will be always to a certain extent a matter of personal opinion, and I believe that in a preliminary work like this revision (which is by no means an exhaustive monograph) it is better to split the

Fig. 3.



Prosteral tubercle: a, *Bryophyma debilis* (Karsch); b, *Anacridium ægyptium* (L.); c, *Patanga japonica* (Bol.); d, *P. succincta* (L.); e, *Valanga nigricornis* (Burm.); f, *Finotina radama* (Brancs.); g, *Acanthacris ruficornis citrina* (Serv.); h, *Glaphyra cyanea* (Stoll). $\times 6$.

group into many small, but well-defined, genera than to distinguish only a few genera with vague diagnoses.

The specific classification, and especially synonymy, proved to be the most difficult part of the work, as the majority of the species had been founded on colour-characters only. I think, however, that I have managed to clear up the confusion in the synonymy of most species in a fairly satisfactory way; this proved to be possible only because I have had before me practically all the species of the group and a great majority of the existing types. A very great advantage

in clearing up synonymy and in establishing a natural classification of species has been gained by adopting the idea of geographical races, or subspecies, which are in many cases distinct from each other both in coloration and in morphology, and have been described accordingly as independent species, but, in fact, are connected by transitional forms inhabiting the intermediate geographical areas; their separate treatment by other writers has swollen enormously the total number of species in the group.

As a result of my revision, the number of genera is increased from seven to twenty-six, while the number of species has been reduced from 130 mentioned by Finot, or from ninety-two of Kirby's Catalogue, down to sixty species and twenty-five additional subspecies; the true meaning of the latter figures will be best realised from the fact that as many as 140 different specific names came into consideration.

The number of new species and subspecies described in this paper is very small, which shows that the group is already fairly well known, and further novelties may be expected only from such places as the interior of Africa, and especially from Australia, New Guinea, and other Indo-Malayan islands.

The following abbreviations are used in the text:—B.M., British Museum; C.M., South African Museum, Cape Town; G.M., Muséum d'Histoire Naturelle de Genève; M.M., Museo Nacional de Ciencias Naturales, Madrid; O.M., Hope Department, University Museum, Oxford; P.M., Muséum National d'Histoire Naturelle de Paris; S.M., Naturhistoriska Riksmuseet, Stockholm; W.M., Naturhistorisches Staatsmuseum, Wien. One asterisk before a name in the synonymy means that the species is known to me by authenticated specimens; two asterisks, that the type has been studied.

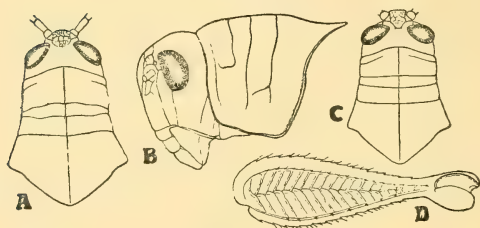
Key to the Genera.

- 1 (50). Pronotum with the median keel more or less developed (in *Melicodes* and *Gowdeya* almost obliterated, but still perceptible), with three transverse sulci. Hind wings, when present, distinctly elongated.
- 2 (9). Frontal ridge very strongly dilated above the ocellum (and not constricted again at the fastigium), narrowed below it and obliterate about halfway between

ocellus and clypeus; its surface convex or flat; margins not raised (fig. 2, a). Elytra obliquely truncate apically; the reticulation in the basal half dense, with the cellules elongate (fig. 5, A, B).

- 3 (8). Elytra extending to the apex of the abdomen or even longer. Prozona not or scarcely shorter than metazona. Prosternal spine straight, not at all or scarcely inclined towards mesosternum, but not touching it.
- 4 (7). Temporal foveolæ distinct (fig. 4); margins of the fastigium slightly raised. Prozona subequal to metazona; its hind angle rounded (fig. 4). Elytra with the veinlets in the apical part not dense, fairly regular, oblique (fig. 5, a).

Fig. 4.



A, B, *Acridoderes crassus*, Bol.; C, D, *Phyxacra strenua* (Walk.).
× 2.

- 5 (6). Distance between the eyes* narrower or only slightly broader than the frontal ridge between antennæ (fig. 4, C); eyes at least twice as high as long†; subocular distance‡ subequal to their length. Frontal ridge below the ocellus slightly impressed. (Africa: genotype, *Caloptenus strenuus*, Walk. (= *Coptacra variolosa*, Krauss)). 1. *Phyxacra*, Karny.
- 6 (5). Distance between the eyes distinctly broader than frontal ridge between

* Seen from above.

† By the length of an eye I mean its horizontal diameter.

‡ Subocular distance is the distance between the lowest point of an eye and the base of the mandible; as a rule, this line is indicated by a sulcus, which may be called the subocular sulcus.

antennæ (fig. 4, A) ; eyes distinctly less than twice as high as long ; subocular distance subequal to their height (fig. 4, B). Frontal ridge below the ocellus not impressed. (Africa: genotype, *Acridoderes crassus*, Bol.).....

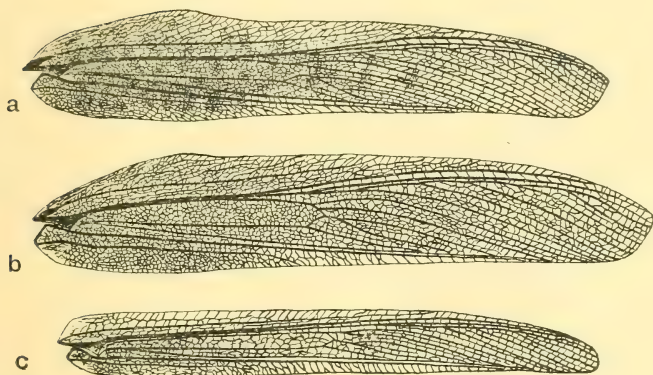
2. *Acridoderes*, Bol.

- 7 (4). No trace of temporal foveolæ ; fastigium strongly convex, its margins not at all raised. Prozona much shorter than metazona ; hind angle of pronotum acute. Elytra with the reticulation in the apical part dense and irregular (fig. 5, *b*). (Africa: genotype, *Acridoderes levigatus*, Bol.)

[gen. nov.

3. *Anacridoderes*,

Fig. 5.

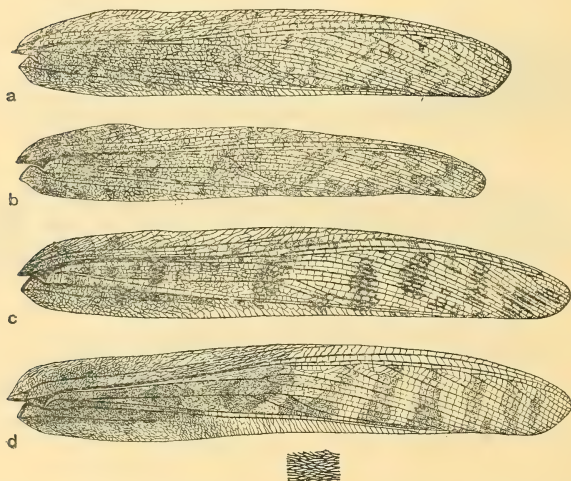


a, *Phyxacra strenua* (Walk.) ; *b*, *Anacridoderes crassus* (Bol.) ;
c, *Rhadinacris schistocercoides* (Brancs.). $\times 2$.

- 8 (3). Elytra in the ♀ (the ♂ not known) reaching only to the middle of the hind femora. Prosternal spine large, thick, strongly bent towards mesosternum and touching the latter ; its apex acute. Prozona much shorter than metazona. (Africa: genotype, *Congoa kutangae*, Bol.).....
4. *Congoa*, Bol.
- 9 (2). Frontal ridge above the ocellus not at all (fig. 2, *c*, *d*) or but feebly dilated (in the latter case it is somewhat constricted again at the fastigium (fig. 2, *b*) ; its margins raised, though sometimes feebly and in certain parts only.
- 10 (11). Elytra with the apex obliquely truncate ; the apical part with regular oblique

- (feather-like) reticulation (fig. 6, a).
 (Asia: genotype, *Acridium violascens*, Walk.) [nov.]
 5. *Pachyacris*, gen.
 11 (10). Elytra with the apex rounded or obliquely rounded; veinlets in the apical part more or less perpendicular to the veins.
 12 (35). Prosternal spine straight, vertical, or only slightly inclined (but never bent) towards mesosternum, but not nearly reaching the latter, and usually compressed laterally (fig. 3, a, b, c, d, e).
 13 (28). Frontal ridge above the ocellus somewhat dilated, distinctly broader than just below it (fig. 2, b).

Fig. 6.



a, *Pachyacris vinosa* (Walk.); b, *Rhytidacris tectifera* (Karsch); c, *Anacridium melanorhodon* (Walk.); d, *Nomadacris septemfasciata* (Serv.). $\times 1\frac{1}{2}$, except the bottom small figure, representing a strongly enlarged section of the discoidal field of *N. septemfasciata*.

- 14 (15). Frontal ridge rather suddenly lowered below the ocellus and completely obliterated halfway between the latter and clypeus. Median keel of pronotum very low, linear; hind angle about 90° . (Africa: genotype, *Acridoderes amethystinus*, Bol.) [gen. nov.]
 6. *Pachynotacris*,
 15 (14). Frontal ridge gradually lowered towards the clypeus and reaching it.

- 16 (19). Prosternal spine straight, cylindrical, with the apical part inflated (fig. 3, *a*). Male cerci short, triangular, with the apex strongly incurved.
- 17 (18). Fastigium impressed, moderately sloping, not closed behind; its margins scarcely raised. Elytra broader, with the apex neither attenuate nor bent backwards. (Africa: genotype, *Cyrtacanthacris debilis*, Karsch.) [nov.]
- 18 (17). Fastigium impressed, strongly sloping, closed (or almost so) behind; its margins distinctly raised, confluent with the margins of the frontal ridge. Elytra narrower, with the apex attenuate and bent backwards (fig. 6, *b*). (Africa: genotype, *Cyrtacanthacris tectiferus*, Karsch.) 7. *Bryophyma*, gen.
- 19 (16). Prosternal spine either not cylindrical or with the apex not inflated.
- 20 (27). Fastigium impressed, forming (when viewed in profile) a distinct, though rounded, angle with the frontal ridge; the latter well developed throughout, with the margins callous (fig. 3, *b*).
- 21 (26). Hind femora and tibiae normally built.
- 22 (23). Elytra broad, apically scarcely narrowed and obliquely truncate. Male cerci strongly laterally compressed, parallel-sided, shorter than the anal plate, with the apex broad, subemarginate; male subgenital plate with the apex divided into two triangular lobes. (Africa, Asia, S. America: genotype, *Gryllus gregarius*, Forsk.) 8. *Rhytidacris*, gen. [nov.]
- 23 (22). Elytra very narrow (fig. 5, *c*) or with the apex attenuate (fig. 6, *c*).
- 24 (25). Face distinctly reclinate. Elytra very narrow, parallel-sided (fig. 5, *c*). Male cerci short, strongly laterally compressed, triangular; male subgenital plate conical. Wings hyaline. (Madagascar: genotype, *Aceridium schistocercoides*, Brancs.) 9. *Schistocerca*, St.
- 25 (24). Face vertical or practically so. Elytra not very narrow, but with the apex attenuate and bent backwards (fig. 6, *c*). Male cerci round, narrow, at least as long as the anal plate, curved; male subgenital plate with the apex trilobate. Wings with the base or a submedian fascia infumate. (Africa, S. Europe, Asia: genotype, *Gryllus Locusta aegyptia*, L.) [gen. nov.]
- 26 (21). Hind femora extremely narrow; hind tibiae strongly laterally compressed at 10. *Rhadinacris*,
- 11. *Anacridium*,

the base, densely hirsute between the spines (fig. 7, *d*). Male subgenital plate elongate-cordiform. Elytra very long and narrow. Wings with the base infumate. (Africa: genotype, *Acridium humilicrus*, Karsch.)

[Karsch.]

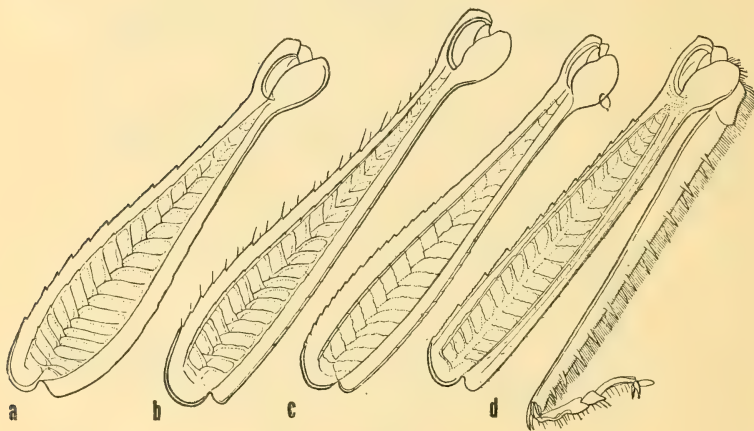
- 27 (20). Fastigium not impressed, sloping and forming a broad bow with the frontal ridge; the latter subobliterated below the ocellum. Wings completely infumate. Male cerci short, somewhat compressed laterally, triangular; subgenital plate conical. Pronotum with the median keel very low, linear. (New Guinea: genotype, *Orthacanthacris bimaculata*, Will.)

12. *Orthacanthacris*,

[gen. nov.]

13. *Willemsea**,

Fig. 7.



a, *Valanga nigricornis* (Burm.); *b*, *Patanga succincta* (L.); *c*, *Chondracris asperata* (Bol.); *d*, *Orthacanthacris humilicrus* (Karsch). $\times 2$.

- 28 (13). Frontal ridge not at all dilated above the ocellus, with its margins parallel throughout or feebly divergent downwards (figs. 2, *c*, *d*).
 29 (34). Hind femora short and broad, with the apical part hardly attenuate (fig. 7, *a*).
 30 (31). Median keel of pronotum high or, when low, always quite distinct and regular, not interrupted or obliterated between the sulci. Male cerci strongly laterally compressed, with the apex attenuate

* Dedicated to Dr. C. Willemse, an ardent student of Indo-Malayan and Australasian Orthoptera.

- and more or less decurved and incurved. Prosternal spine laterally compressed, slightly bent backwards. (Indo-Malaya, Australasia: genotype, *Aceridium nigricorne*, Burm.)
- 31 (30). Median keel of the pronotum very low, obliterate, or practically so, by the rugose sculpturation. 14. *Valanga**, gen. [nov.]
- 32 (33). Wings brightly coloured, non-transparent. Fastigium flat. Prosternal spine not compressed laterally, in the apical half incrassate. (Africa: genotype, *Gowdeya ugandana*, sp. n.) 15. *Gowdeya*†, gen. [nov.]
- 33 (32). Wings hyaline. Fastigium with a longitudinal impression. Prosternal spine compressed laterally, not incrassate before the apex. (Philippines: genotype, *Cyrtacanthacris tenebrosa*, Walk.) 16. *Melicodes*, gen. [nov.]
- 34 (29). Hind femora long and narrow, with the apical part attenuate (fig. 7, *b*). Elytra long and narrow, with the apex narrow, oval. Male subgenital plate long, conical, pointed. (Asia, Indo-Malaya: genotype, *Gryllus Locusta succinctus*, L.) 17. *Patanga*‡, gen. [nov.]
- 35 (12). Prosternal spine strongly inclined or angulately bent towards the mesosternum, touching the latter or nearly so; its preapical part more or less incrassate; the apex pointed or obtuse (fig. 3, *f, g, h*).
- 36 (37). Hind femora more slender, with the apical part distinctly attenuate (almost as in *Patanga*, fig. 7, *b*). Male cerci strongly laterally compressed, with the apex attenuate and decurved. Male subgenital plate conical, attenuate. (Australia, Oceania: genotype, *Cyrtacanthacris guttulosa*, Walk.) 18. *Austracris*, gen. [nov.]
- 37 (36). Hind femora less slender, scarcely attenuate (as in fig. 7, *a*).
- 38 (39). Reticulation of the basal half of elytra unusually fine and dense, the cells elongate (fig. 6, *d*). (Africa: genotype, *Aceridium septemfasciatum*, Serv.) 19. *Nomadacris*, gen. [nov.]
- 39 (38). Reticulation of the basal half of elytra normal.

* The native Javanese name for locusts is "Valang" (Dammerman, 'Landbouwdierkunde van Oost-Indie,' p. 94).

† Named after Mr. C. C. Gowdey, late Government Entomologist in Uganda, who has added much to our knowledge of the insect fauna of that country by extensive collecting.

‡ *Patanga*, according to Serville (Ins. Orth. p. 556), is the Sanscrit name for a locust.

- 40 (41). Discoidal field of elytra scarcely transparent, the veinlets being incrassate and confluent, and the membrane corneous. Hind tibiae with 8 outer and 11 inner spines. Male subgenital plate acutely conical. Wings coloured. (Africa; genotype, *Gryllus Locusta cyaneus*, Stoll.) 20. *Glaphyra*, [gen. nov.]
- 41 (40). Discoidal field of elytra more or less transparent, the veinlets being not at all or but slightly incrassate, and the membrane hyaline.
- 42 (49). Pronotum smooth or punctured, but not tuberculate. Upper carina of the externo-median area of hind femora convex (as in fig. 7, a, b). Wings not coloured.
- 43 (44). Median keel of pronotum strongly raised in the prozona and thick. Male subgenital plate trilobate apically. Hind tibiae with 6 outer and 9 inner spines. (Africa: genotype, *Gryllus ruficornis*, F.) 21. *Acanthacris*, gen. [nov.]
- 44 (43). Median keel of pronotum low or but slightly raised, not thick. Male subgenital plate not trilobate.
- 45 (46). Disc of pronotum smooth and velvety. Male subgenital plate acutely conical. (Africa, Asia: genotype, *Gryllus Locusta tartaricus*, L.) 22. *Cyrtacanthacris*, [Walk.]
- 46 (45). Disc of pronotum punctured, not velvety.
- 47 (48). Male subgenital plate pyriform, with the apex acute. (Africa, Arabia: genotype, *Cyrtacanthacris prasina*, Walk.) 23. *Kraussaria**, gen. [nov.]
- 48 (47). Male subgenital plate acutely conical. (Madagascar: genotype, *Acridium ranavaloe*, Finot.) 24. *Finotina* †, gen. [nov.]
- 49 (42). Pronotum densely covered with tubercles and rugosities. Upper carina of the externo-median area of hind femora straight or practically so (fig. 7, c). Hind tibiae with 9 outer and 11 inner spines. Male subgenital plate conical. Wings coloured. (Africa, Asia: genotype, *Acridium roseum*, De Geer.) 25. *Chondracris*, gen. [nov.]
- 50 (1). Pronotum cylindrical, with four transverse sulci. Wings in the shape of a quarter of a circle, scarcely longer than broad. (Australia: genotype, *Loiteria rubripes*, Sjöst.) 26. *Loiteria*, Sjöst.

[To be continued.]

* Dedicated to Dr. Hermann Krauss, leading authority on Orthoptera.

† In remembrance of A. Finot, first reviser of the group.